

## ABSTRACT

A gain boost circuit is provided in a differential amplifier including differentially connected first and second input transistors the drains of which are coupled to sources of first and second cascode transistors. A third cascode transistor has a source coupled to a drain of the first cascode transistor and a drain coupled to a bias current source. A gain boost amplifier has an output coupled to the gate of the third cascode transistor, a first input coupled to the drain of the first cascode transistor, and a second input coupled to the drain of the second cascode transistor.